



Solutia Inc.

575 Maryville Centre Drive St. Louis, Missouri 63141

P.O. Box 66760 St. Louis, Missouri 63166-6760 Tel: 314-674-1000

July 7, 2003 (Via certified or express mail)

Mr. Kevin Turner-Environmental Scientist, OSC U. S. Environmental Protection Agency c/o Crab Orchard National Wildlife Refuge 8588 Rt. 148
Marion, IL 62959

Mr. Thomas Martin, Esq. Associate Regional Counsel 77 West Jackson Boulevard (C-14J) Chicago, IL 60604-3590

Re: Sauget Sites Area I - May 31, 2000 Unilateral Administrative Order (UAO) Sediment / Soils Removal Action #26 - Monthly Report June 1 - June 30, 2003 Reporting period

Dear Mr. Turner and Mr. Martin,

Enclosed is the Monthly Report for the Sauget Sites Area I May 31, 2000 Unilateral Administrative Order ("UAO") Sediment Removal Action. This submittal is in fulfillment of the monthly reporting requirements of the UAO, Section V, and paragraph 3.4. Reporting. This report is for the June 1 – June 30, 2003 reporting period.

Sincerely,

Gary vandiver

Project Coordinator

Solutia Inc.

cc: Nabil Fayoumi - USEPA Region 5

Sandra Bron - IEPA

Mike Coffey - USFW

Linda Tape - Husch & Eppenberger

Mayor Frank Bergman - Cahokia

Village of Sauget - c/o P. H. Weis & Associates (Attn: Brian Nelson)

Mayor P. Sauget - Sauget, IL

Richard Williams - Solutia

### Sauget Sites Area I - Sauget, Illinois

### May 31, 2000 UAO - Dead Creek Sediment Removal Action

### **Monthly Report**

**Date of Report:** 

July 7, 2003

Period Covered:

June 1, 2003 - June 30, 2003

**Next Report Period:** 

July 1, 2003 - July 31, 2003

### **Background**

A Unilateral Administrative Order ("UAO") was issued to Solutia by the U. S. EPA on May 31, 2000, requiring construction of an on-site containment cell, removal of affected creek bed sediments and soils and flood plain soils from specific sections of Dead Creek, and placement of the affected sediments and soils in the newly constructed on-site cell. A Time Critical Removal Action Work Plan ("TCRAWP") was initially submitted to the Agencies on June 30, 2000 for review and approval. Agreements sufficient to proceed with issuance of a request for bids for the containment cell construction were reached in December 2000. Bids were received in late January and evaluated in February 2001.

Fieldwork began on the sediment de-watering phase of the project in November 2000. Installation of the required facilities (piping, pumps, basins, etc.) to de-water the sediments while the containment cell was being constructed was completed and started up in February 2001. Operation of these facilities will continue until all sediments are placed into the containment cell.

Subject to the inclusion of all comments and agreed upon revisions; approval of the containment cell design by U. S. EPA was received on March 5, 2001. A contract for construction of the containment cell was awarded on March 8, 2001 to LMS Environmental Contracting, Inc. ("LMS"). Placement of fill for the Containment Cell berms began on April 23, 2001. A March 30, 2001 revised draft containment cell design was approved by the Agencies in a May 10, 2001 letter. Construction was completed on the Containment Cell on September 13, 2001. A draft Containment Cell Certification Report was submitted for the Agencies' review and approval upon construction completion. The Containment Cell was approved on September 24, 2001 by USEPA and IEPA for receipt of sediment. Placement of sediments into the cell began on September 26, 2001.

An Amendment to the UAO was received on October 29, 2001. The Amendment modified the project scope of the UAO – adding Creek Sector F sediments removal and placement into the Containment Cell. On August 20, 2001, Solutia requested a change in

the Post Removal Confirmation Sampling and analytical protocols. In a November 30, 2001 communication, the Agency responded with revised sampling and analytical protocols.

### **Agency Actions / Communications**

- Revision 01 of the Draft Groundwater Monitoring Plan submitted to the Agencies on August 3, 2001 remained under review.
- The Operations and Maintenance Report submitted for the Agencies' review and approval on August 28, 2001- remained under review. Portions of the Plan applicable to the placement of sediments have already been approved.

### Work Performed during the reporting period

- Performed inspections of the site.
- Maintained operation of the 50-gpm stormwater treatment system.
- Inspected and maintained the 6oz. geotextile/6 mil scrim reinforced poly cover over the containment cell.
- Maintained stormwater and leachate collection controls around the containment cell.
- Monitored support area facilities.
- Collected groundwater samples during the June 2003 quarterly sampling of the groundwater monitoring wells around the containment cell. Samples will be analyzed for parameters in the Draft Groundwater Monitoring Plan Revision 01.
- The design for the liner to be installed in Creek Sector B has been completed.
- The cell cover design for the TSCA Cell has been completed.
- The section of Dead Creek due South of Edgar Road was staked and photo documented to locate high spots.

### **Data Submittal**

Validated data from the March 2002 TSCA Cell Quarterly Groundwater Monitoring sampling event are submitted with this report.

### Work scheduled for next reporting period

- Conduct routine inspection of the containment cell.
- Continue operation of the 50-gpm stormwater treatment system.
- Perform necessary operation and maintenance on the containment cell and temporary treatment system.
- Analyze groundwater samples for parameters in the Draft Groundwater Monitoring Plan Revision 01.
- Remove high spots from the section of Dead Creek due South of Edgar Road.
- Hand over operation and maintenance of the pumping system to the Village of Cahokia.

### PROJECT COMPLETION

Mobilization	100 %
Berm Construction	100 %
Liner Installation	100 %
Sediment Removal Preparation	100 %
Sediment Excavation (Site M)	100 %
Sediment Excavation (Original Scope of Work)	100 %
Sediment Excavation (Sector F)	100 %
Temporary Cover installation	100 %
Demobilization - Phase I	100 %
Final Cover Installation	0 %
Demobilization - Phase II	0 %
Final Report Preparation	0 %

### **Problems and Solutions**

In discussion with officials from the Village of Cahokia, standing water in separate segments of Dead Creek emerged as a source of concern, given the current public health warnings about the West Nile Virus. The water is stagnant because the creek bottom is significantly lower than culvert inverts.

Because of this concern, Solutia agreed to install temporary pumps to pump the water downstream. This work was completed during the September 1, 2002 – September 30, 2002 reporting period. The permanent pumping system was installed during the January 1, 2002 – January 31, 2002 reporting period. The system consists of six pumps permanently mounted in the creek. The pumps are fitted with level control switches and will pump water downstream through the existing culverts when the water level is below the culvert inverts.

During the March reporting period, level adjustments were performed at each of the six (6) pump locations and the system went on-line. Gravel sumps were scheduled to be installed at each pumping location during the April reporting period. However, due to inclement weather this work was rescheduled. Gravel sumps were placed at each pump location during the May reporting period.

Standing water was noted in the section of Dead Creek due South of Edgar Road. During the June reporting period, this section was staked and inspected to locate high spots. The removal of the high spots from this section of Dead Creek is scheduled for the July

reporting period. Handover of the system to the Village of Cahokia is also scheduled for the next reporting period.

### **Submittal Schedule Status**

See attached UAO schedule

### Issues under review

None

### Comments

None

# May 31 Sauget Area I UAO Sediment Removal Action SCHEDULE

Deliverable	Description	Due Date
Issuance Date	Date UAO signed by Muno	31-May-00
Effective Date	10 business day after issuance	14-Jun-00
Notice of Intent to Comply	3 business days after effective date	19-Jun-00
Designation of Contractor and Project Coordinator	5 business days after effective date	21-Jun-00
Access	14 calendar days after effective date	28-Jun-00
Time Critical Removal Action Work Plan Submittal	15 business days after effective date	7-Jul-00
EPA Approval of TCRA W/P		May 10, 2001
Monthly Reports	Begin 30 calendar days after approval of TCRA W/P until completion	June 10, 2001
Final Report	60 Calendar days after completion of sediments and soils removal	
Mitigation Plan	60 Calendar days after completion of sediments and soils removal	May 22, 2002

### BCC: (via e-mail only)

- S. Smith 1S
- B. Gilhousen 3S
- B. Yare 1S
- L. Tape Husch & Eppenberger, LLC
- J. Lebold 1740
- M. Peal
- S. Wendler 3S
- D. Ridenhower 1740
- A. Faust 3N
- R. Williams Williams & Associates



### Sauget Area 1 Ground Water - March 2003

### Method 8260 Volatile Organic Compound Data

Uni Compound  ,1,1-Trichloroethane ,1,2-Trichloroethane ,1,2-Trichloroethane ,1-Dichloroethane ,1-Dichloroethane ,2-Dichloroethane ,2-Dichloropropane -Butanone (MEK) -Hexanone -Methyl 2-pentanone (MIBK) -tectone -terroethane -			03/25/03 ug/l 5 U 5 U 5 U 5 U 5 U 5 U 5 U 5 U 5 U 5 U	03/27/03 ug/l 5 U 5 U 5 U 5 U 5 U 5 U 5 U	03/26/03 ug/l  5 U  5 U  5 U  0.75 3  0.69 J	03/26/03 ug/l 5 U 5 U 5 U 5 U 5 U 3 U	03/26/03 ug/l 5 U 5 U 5 U 5 U	03/27/03 ug/l 5 U 3 U! 5 U
ompound  1,1-Trichloroethane  1,2-Terrachloroethane  1,2-Trichloroethane  1-Dichloroethane  2-Dichloroethane  2-Dichloroethane  2-Dichloropropane  Bulenone (MEK)  Hexanone  Methyls2-pentanone (MBK)  cetone  cirzehe  comodichloromethane  comodichloromethane  comomodichloromethane  comomodichloromethane  comomodichloromethane  comomodichloromethane  comomodichloromethane  comomodichloromethane  comomodichloromethane	51 51 51 51 51 51 51 25 25		5 U 5 U 5 U 5 U 5 U 5 U 5 U 5 U	5U 100 5U 1U 5U	5 U 5 U 5 U 0.733 0.69 J	5 U 5 U 5 U 5 U 5 U	5 บ 3 เม 5 บ 5 บ	50 301 50 50
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arbon disulfide arbon tetrachloride	\$U		<b>3</b> 0	3U	5U	3U	30	<b>5</b> U
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hloroethane	10 1	U	10 U	10 U	10 U	10 U	10 U	10 U
hlaroform	<b>5</b> U		<b>3</b> U	-3 O	5 Ü	30	<b>5</b> U	3U
hloromothene	101	ט	10 U	10 U	10	מסו	10 U	10 U
ls/Trans-1,2-Dichleroethene	<b>5</b> U		<b>50</b>	3 U	3 <b>t</b>	30	5 <b>U</b>	3U
bromochloromethane	<b>5</b> U		5 U	<b>5</b> U	5 U	5 U	5 U	5 U
thy/benzeng	<b>5</b> U		<b>KU</b>	***	50	10	5.0	3.0
lethylene chloride (Dichloromethane)	4.7	1995 M. 1997 C. SAN BELLEVI B. M. 1987 B. 1987	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U
yrene .	**************************************		311	30	<b>3</b> U	<b>J1</b>	<b>5</b> U	510
etrachloroethene	5 U		5 U	S U	5 U	5 U	5 U	5 U
oluene	5 U			310	<b>3U</b>	3 W	3U	3U
nichloroethene	2.7		0.29 J	0.37 J	2.7 U	0.3 J	2.7 U	2.7 U
nyl chloride	101		10 U	1010	10 U	10 U	lo n	10.0
ylenes, Total	5 U		5 U	5 U	5 U	3 U	5 U	5 U
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NOTES: U - not detected, J - crimmted value, J - estimated value (biased low), J + - estimated value (biased low), J + - estimated value (biased high), N - sententively identified, R - rejected, M - EMPC, D - result from diluted analysis, EB - equipment blank, DUP - field duplicate.

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### Sauget Area 1 Ground Water - March 2003

### Method 8260 Volatile Organic Compound Data

	Sample ID	TCMW-05M	TCMW-05\$	TCMW-06M	TCMW-065
	Sample Date	03/25/03	03/25/03	03/25/03	03/25/03
	Units	ug/l	ug/l	ug/i	ug/ī
Compound					
i,i,i-Trichloroethane		5 U	5 U	5 UJ	5 U
1,1,2,2 Tetrachiotoethane		5 UI	5 III	5 UJ	**************************************
1,1,2-Trichloroethane 1,1-Dichloroethane	800000000000000000000000000000000000000	5 U 3 U	5U 5U	5 UJ 3 UJ	5 U 5 O
l,l-Dichloroethene			5 U	5 UJ	5 U
1,2-Diahtoroethane		5 U 5 U	ju ju	3.UJ	3.0 .5.(L.)
1,2-Dichloropropane	\$2 <b>60</b> 0.0000000000000000000000000000000000	5 U	5 U	5 UJ	5 U
2-Butanone (MEK)		25 U	25 U	25 UJ	25 U
2-Hexanone	neren errente erre errente erre er er et bleve	25 U	<b>25</b> U	25 UJ	25 U
4-Methyl-2-pentanone (MIBK)		25 U	25 U	25 UJ	25 U
Acetone Benzens	000000000000000000000000000000000000000	50 U	50 U	50 UJ	50 U
		120	120	1210	1 <b>2</b> 14
Bromodichlorometh <del>ane</del> Bromoform	\$88801 <b>5</b> 01001000000000000000000000000000000	5 U 3 U	5 U 5 U	5 UJ 3 UJ	5 U 5 U
Bromomethane		9.8 UJ	9. <b>8 U</b> J	9.8 UJ	9.8 UJ
Carbon disulfide		3 U	5 U	5UI	5U
Carbon tetrachloride		5 U	3 U	5 UJ	5 U
Cirlorobenzene		7	3U 2	3:UI	<b>5</b> U
Chloroethane		10 U	10 U	10 UJ	10 U
kloroform			3 <b>U</b>	<b>40</b> 0	5 U.
Chloromethane	. Commission of the commission	10 U	10 U	10 UJ	10 U
Cis/Trans-1,2-Dichloroethene			<b>5</b> TU	3 <b>U</b> I	f <b>u</b>
Dibromoch loromethane Eihylbenzene	000000000000000000000000000000000000000		5 U 3 B	3 UJ	5U ★U
Methylene oblodde /Picklesse		5 U 4.7 U			
Methylene chloride (Dichloromethan Styrene	e)		4.7 U ≸ U	4.7 UJ 5 UJ	4.7 U \$18
Tetrachioroethene				5 UI	5 U
Toluene		5U	<b>1</b> U	3 U)	30
Trichloroethene	0.0000.00000000000000000000000000000000	556557755545666886669996989696989898989	2.7 U	2.7 UJ	2.7 U
Viny) chloride		1011		1010	IOU
Xylenes, Total	rs,000000000000000000000000000000000000	5 U	5 U	5 UJ	5 U
is-1,3-Dichloropropene				i Vi	IU)
rana-1,3-Dichloropropene		5 U	5 U		5 U
Tutal VOCa		7.88	מא	ND	MD

NOTES: U - not detected, J - estimated value, J - - estimated value (biased low), J+ - estimated value (biased low), J+ - estimated value (biased high), N - tentatively identified, R - rejected, M - EMPC, D - result from diluted analysis, EB - aquipment blank, DUP - field duplicate,

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### Appendix A Solutia Sauget Area 1

### Ground Water - March 2003

### Method 8270 Semivolatile Organic Compound Data

	Sample ID	TCMW-01M	TCMW-015	TCMW-02	TCMW-03M	TCMW-03S	TCMW-03S DUP	TCMW-04
	Sample Date	03/26/03	03/26/03	03/27/03	03/26/03	03/26/03	03/26/03	03/27/03
	Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Compound								
1,2,4-Trichlorobenzene		10 U	10 U	10 U	10 Ų	10 U	10 U	10 U
1,2-Dichlorobenzene		101)	1017	10 (1)	IOU	10 U	100	10 <b>U</b>
1,3-Dichlorobenzene		10 U	10 U	LO U	10 U	10 U	10 U	10 U
1,4 - Dichlorobenzene		1011	10 U	10'U	100	3.10 U	lou	10.0
2,2'-Oxybis(1-Chloropropane)		10 U	10 U	10 U	10 U	10 U	10 U	10 U
2A3-Trichlorophenol		10 0	10 M	10 U	100	100	iou	10 U
2,4,6-Trichlorophenol		2.1 U	2.1 U	2.1 U	2.1 U	2,1 U	2.1 U	2.1 Ū
2,4-Dictilorophenol		10 U	1010	10 U	10 U	1017	10 U	10 U
2,4-Dinitrophenol	Anna value de la reva montrata con	14 U	14 U	14 U	14 U	14 U	14 U	14 U
2.4-Dintrotoluese		10 tr	10 U	101/	, 10 U	10 A	10 U	10 U
2,6-Dinitrotoluene		10 U	10 U	10 U 10 U	10 U 10 U	10 U	10 U	10 U
2-Citoronaphthaleae		10 Ü	10 U			10 U	iov.	1017
2-Chlorophenol 2-Methylnaphthalene		10 U 10 U	10 U	10 U 10 U	10 U 10 U	10 U	10 U	10 U
2-Methylphenol (o-cresol)		10 U	10 U	10 U		IOV	1017	100
2-vienty phenoi (o-cresor) 2-vienty phenoi (o-cresor)		SO U	30 IJ	10 U	10 U 50 U	10 U 50 밥	10 U 50 U	10 U
2-Nitrophenol		10 U	10 U	10 U	10 U	30 U	10 U	50 V
3.3° Dichlorobenzidine		20 Ü	20 U	20 U	20 U	20.0	20 U	10 U 20 U
3-Methylphenol/4-Methylphenol		10 U	10 U	10 U	10 ΰ	10 U	10 U	10 U
3-Nitrosmilline		30 U	30.U	30 U	30 U	30 U	30 U	50 U
2-Methyl-4,6-dinitrophenol		13 U	13 U	13 U	13 U	13 U	13 U	13 U
4-Bromophenylphenyl ether		iÜ	10	10	10	I U	IU	310
4-Chloro-3-methylphenol	100 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloroaniline			20 U	20 W	20 U	20 C	20 ∪	20 U
4-Chlorophenylphenyl ether	00 0 7 00 00 00 00 00 00 00 00 00 00 00	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitroaniline		50 U	50 U	50.U	50 (t	50 L/	<b>30 T</b>	30.t/
4-Nitrophenol	CO-COMPANIES CONTRACTOR DE CONTRACTOR DE CONTRACTOR DE CONTRACTOR DE CONTRACTOR DE CONTRACTOR DE CONTRACTOR D	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Acenaphthene		10 U	10.U	1010	10 U	1017	10 U	10.0
Acenaphthylene	000004000000000000000000000000000000000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene		10 U	to U	1017	1010	1011	10 C	101J
Benzo(a)anthracene	444444000000000000000000000000000000000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene		10 EU	10 U	1011	HU.	1019	1010	10.0
Benzo(b)fluoranthene	race record become at a statistical	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g.li,i)perylene		10 U	iëU	10 U	1017	10 U	10 U	IOU .
Benzo(k)fluoranthene	00.000000000000000000000000000000000000	10 <b>U</b>	10 U	10 U	10 U	10 U	10 U	10 U
MOTEC. II I								

NOTES: U - not detected, J - estimated value, J - estimated value (biased low), I - estimated value (biased high), N - tentualized identified, R - rejected, M - EMPC, D - result from diluted analysis, EB - equipment blank, DUP - field duplicate.



## Appendix A Solutia Sauget Area 1

### Ground Water - March 2003

### Method 8270 Semivolatile Organic Compound Data

	Sample ID	TCMW-01M	TCMW-01S	TCMW-02	TCMW-03M	TCMW-033	TCMW-03S DUP	TCMW-04
	Sample Date	03/26/03	03/26/03	03/27/03	93/26/03	03/26/03	03/26/03	03/27/03
	Units	ug/l .	ug/i	ug/l	ug/l	ug/l	Ngu	ng/l
Compound								
Benzyl butyl phthalate		10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbazole		34U	3.4 U	3,4 U	34U	340	3,41/	34U
Chrysene Di-n-buty lphthalate	::::::::::::::::::::::::::::::::::::::	10 U 10 U	10U 10U	10 U	10 U 10 U	10 U 10 U	10 U	10 U
Di-n-octy/phthalate		10 U	10 U	10 U	: 10 U 10 U	10 U	10 U 10 U	10 U
Dibenzo(a,h)anthracena	(4)(4)(4)(4)(4)(4)(4)(4)(4)(4)(4)(4)(4)(	10 U	10 U	iou	10 U	10 U	ioti	10 U 10 U
Dibenzofuran	awalest interest	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Diethylphthalate		io U	10 U	100	1011	10 U	101	10 U
Dimethylphthalate	(december de la composition de	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthérie		10 <b>U</b>	10 V	10 U	10 U	1037	10 U	10 Ü
Fluorene		1 <b>U</b>	1 U	1 U	1 U	1 U	1 U	١u
Hexachlorobenzene		10 U	10 U	101/	10 <b>.</b> 0	1 U 10 U	1010	10 V
Hexachlorobutadiene		10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloropyclopentadiene		10 (/	10 U	1011	10 U	10 U	10 U	10.0
Hexachloroethane	categore shortest as a company	1.9 U	1.9 U	1.9U	1.9 U	1.9U	190	1.9 U
Indenc(1,2,3-cd)pyrene Isophorone		IO D	10.0	ioù:	100	101	to ti	10 U
isopnorone N-Nitroso-di-n-propylamine	granda a ann a ann a ann a	10 U 10 U	10 U	10 U 10 U	10 U 10 U	10 U 10 U	10 U	10 U
N-Nitrosodiphenylamine		5 U	10 U	5 U	5 U	5 U	10 ប 5 ប	101) 5 U
Naphthalene		10 U	10 U	10 U	10.0	SIO U	10.0	30 300
Nitrobenzene	AND REAL PROPERTY OF THE PROPE	3,5 Ų	3.5 U	3.5 U	3.5 U	3.5 U	3,5 U	3,5 U
Pentachlorophenol		<b>5</b> U		IU	<b>3</b> U	10		5 <b>U</b>
Phenanthrene		10 U	10 U	10 U	10 U	10 U	10 U	10 U
Phonoi		10 U	10 U	10 U	100	10U	10 V	lo ti
Pyrenc		10 U	10 U	10 U	10 U	10 Ù .	10 U	10 U
bis(2-Chloroethoxy)methane		97.75.7 <b>7</b> 893.00399999999999999999999	10 U	10 U	lou	iou	1017	10 U
bis(2-Chloroethyl)ether	**********	10 U	lou	10 U	10 U	10 U	10 U	10 U
bis(2-Ethylbecyl)phthalate			240	24U	240	2 <b>4</b> U	2 <b>4</b> U	24U
Total Semivolatiles	nonananananan persebatah sa	ND	ND	ND	ND	ND	ND	ND

NOTES: U - not detected, J - estimated value, J - estimated value (biased low), J + - estimated value (biased high), N - tanistively identified, R - rejected, M - EMPC, D - result from diluted analysis, EB - equipment blank, DUP - field duplicate.



## Sauget Area 1 Ground Water - March 2003 Method 8270 Semivolatile Organic Compound Data

	Sample ID	TCMW-05M	TCMW-055	TCMW-06M	TCMW-068
	Sample Date	03/25/03	03/25/03	03/25/03	03/25/03
	Units	ug/1	ug/l	ug/l	ug/l
Compound					
1,2,4-Trichlorobenzene		10 U	10 UJ	10 U	10 Ŭ
1,2-Dichlorobeszéne		2.4J	1001	IOU	10.T
1,3-Dichlorobenzene		10 U	10 UJ	10 U	10 U
1,4-Dichlorobenzen#		1011	10 ប្រ	100	iou
2,2*-Oxybis(1-Chloropropane)	Notes (000000000000000000000000000000000000	10 U	10 UJ	10 U	10 U
2,4,5-Trichlorophenot		10 U	1000	10 U	100
2,4,6-Trichlorophenol	Lacaterosastaseas cases de con-	2.1 <b>U</b>	2.1 UJ	2.1 U	2.1 U
2.4-Dichlorophenel		10 U	10 W	16 U	100
2,4-Dinitrophenol 2,4-Dinitrotoluene		14 U 10 U	14 UJ 10 UJ	14 U 10 U	14 U 10 U
2,6-Dinitrotoluene		10 U	10 UJ	10 U	10 U
2-Chloronephihalene	88/m/84/00/00/00/00/00/00	10.0	1007	iou	ion in the second of the secon
2-Chlorophenol		10 U	10 UJ	10 U	10 U
2-Metnyinaphthalens		10 C	1001	100	16U
2-Methylphenol (o-cresol)	(0) (0) (0) (0) (0) (0) (0) (0) (0) (0)	10 U	10 UJ	10 U	10 U
2-Nitroaniline		50 T	30 UT	<b>3</b> 0U	5010
2-Nitrophenol	400-000-000-000 100-00-00-00-00-00-00-00-00-00-00-00-00-	10 U	10 UJ	10 U	10 U
3,3*-Dichlorobenzidine		20 U	201J	20U	20 U
3-Methylphenol/4-Methylphenol	and the same and the same and the	10 U	10 UJ	10 U	10 U
3-Nitroaniline		50:U	50 L/D	30 Ü	30 U
2-Methyl-4,6-dinitrophenol		13 U	13 UJ	13 U	13 U
d-Bromophenylphenyl ether		IÜ	i U	:10	10
4-Chloro-3-methylphenol		10 U	10 UJ	10 U	10 U
4-Chlorostillise		20 U	20 UI	20 U	20 <b>U</b>
4-Chlorophenylphenyl ether		10 U	10 UJ	10 U	10 U
4-Nitroanline		50 U	50 (U	<b>Jou</b>	90 U
4-Nitrophenol		50 U	50 UJ	50 U	50 U
Acenaphthene		10 U	10 UJ	40U	16·U
Acenaphthylene		10 U	10 UJ	10 U	10 U
Anthracene		10:11	10 UI	1010	iθU
Benzo(a)anthracene		10 U	iou	10 U	10 U
Benzo(a)pyrenu		iou ::	iou	IOU	IOU
Benzo(b)fluoranthene		10 U	10 U	10 <b>U</b>	10 U
Benzo(g,h,i)perylene		IOU:	10 (1	10 U	101)
Benzo(k)fluoranthene NOTES: II and detented I are	<del></del>	10 U	10 U	10 U	10 U  4 - PMPC D - result from diluted gralysis. FB - equipment blank. DLP - field dunlicate.

NOTES: U - not detected, I - estimated value, J - estimated value (biased low), I+ - estimated value (biased high), N - tentatively identified, R - rejected, M - EMPC, D - result from diluted snalysis, EB - equipment blank, DUP - field duplicate.



### Sauget Area 1

### Ground Water - March 2003

### Method 8270 Semivolatile Organic Compound Data

	Sample II)	TCMW-05M	TCMW-05S	TCMW-06M	TCMW-06S	1
	Sample Date	03/25/03	03/25/03	03/25/03	03/25/03	
	Units	ug/i	ug/1	ug/l	ug∕l	
Compound		•				
Benzyl butyl phthalate	de extra construir estas e	10 U	10 U	10 U	10 U	adamentationserium in a commission and a
Carbazole		3.4 U	3.4.03	340	34女 10 U	
Chrysene Di-n-butylphthalate	15 \$ 70\$ 10 \$ 10 \$10 \$10 \$10 \$10 \$10 \$10 \$10 \$	10 U 10 U	10 U 10 U	10 U 10 U	10 U	
Di-n-octylphthalate		10 U	10 UJ	10 U	10 U	
Dibenzo(a,h)anthracene		100	10 U	10 Ü	iou	
Dibenzofuran	an en anticologica de la companya d	10 U	10 <b>U</b> J	10 U	lou	
Diethylphthalate		100	10UJ	10 U	10 U	
Dimethylphthalate	** *** *** *** *****	10 U	10 UJ	10 U	10 U	
Fluoranthene		10.0	10.ft	10 U	1013	
Fluorene Hexachtorobenzene		1 U 10 U	1 UJ	1 U 16 U	1 U (6 U	
Hexachiorobutadiene		10 U	10 U 10 UJ			
Hexachiorocyclopentadiene		iou	10 01	IOU IOU	10 U 10 U	
Hexachloroethane		1.9 U	1.9 UJ	1.9 U	1.9 U	
Indeno(1.2;3-cd)pyrene		ίου	1010	iov	100	
Isophorone		10 U	10 UJ	10 U	10 U	
N-Nitroso-di-n-propylamine		10U	10.01	10.0	10U ::	
N-Nitrosodiphenylamine Naphthalene		5 U	5 UJ	5 U	5 U	
Naphthalene		1013	10.01	100	1010	
Nitrobenzene Pentachtorophenel		3.5 U	3.5 UJ 5 U	3.5 U 3 U	3.5 U	
Phenanthrene		9 ប 10 ប	5 U 10 UJ	3 U 10 U	<b>*</b> U	
Plienoi		16 U	10 U1	100	IOU IOU	
Pyrene		10 U	10 U	10 U	10 U	
bis(2-Chioroethoxy)methane		10 U	10.01	100	10 U	
bis(2-Chloroethyl)ether		10 U	10 UJ	10 U	10 U	
bis(2-Ethylhexyl)phthalate		24U	240	240	2.4U	
Total Semivolatiles		2.4	ND	ND	ND	

NOTES: U-not detected, J-estimated value, I--estimated value (biased low), J+-estimated value (biased high), N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, DUP-field duplicate.

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Page

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### Appendix A Solutia Sauget Area 1

### Ground Water - March 2003 Method 680 Polychlorinated Biphenyl Data

	Sample ID	TCMW-01M	TCMW-015	TCMW-02	TCMW-03M	TCMW-03	S TCMW-03S DUP	TCMW-04
	Sample Date	03/26/03	03/26/03	03/27/03	03/26/03	03/26/03	03/26/03	03/27/03
	Units	ug/l	ug/l	ug/l	ug/l	ng/l	ug/l	ug/l
Compound	*							
Monochlorobiphenyl	6638400000000000000000000000000000000000	0.1 Ŭ	0.1 U 0.1 U	0.1 U 0.1 U	0.1 U 0.1 U	0.1 U	0.1 U 0.1 U	0.1 U 0.1 U
Dichlorobiphenyl Trichlorobiphenyl		0.1U 0.1U	0.1 Ü	0.1 U	0.1 U	0.1 U 0.1 U	0.1 U	0.1 U
Letrachiorobiphenyl		0.211	0.211	0.20	0.211	0.02 U	02U	0.2 U
Pentachlorobiphenyl	1200.01900.000.0000000.0000000000	0.2 Ü	0.2 U	0.2 U	0.2 U	0.2 U	0,2 U	0.2 U
Hexachlorobiphenyl		0211	0.2U	6.2 U	02U	0.21	62U	024
Heptachlorobiphenyl	rational contrasts account the contrast contrasts on	0.3 U	0.3 U	0,3 U	0.3 U	0.3 U	0.3 U	0.3 U
Cotechiorobiphenyl Nonachlorobiphenyl		03.U 0.5 U	0.3 U 0.5 U	0,3*U 0,5 U	0.3 U 0.5 U	0.3 U 0.5 U	03U 05U	0.3 U 0.5 U
Decachioropiphenyl		0.5 U	0.5 U	0,5 U	0.30	0.50	0.5U	0.5 <b>V</b>
Total PCBs		ND	ND	ND	ND	ND	ND	ND
							-	
NOTES: U - not detected, J	- estimated value, 3 e	stimated value (blased low), J+-e	stimated value (biased high), N - t	entatively identified, R - rejected,	M - EMPC, D - result from dilute	analysis, EB	- equipment blank, DUP - field duplicate.	
						1.	ŧ	
							Page 1 of	2



### Appendix A Solutia Sauget Area 1

### Ground Water - March 2003

			Method 6	80 Polychlorin	ated Biphenyl Data
	Sample ID	TCMW-05M	TCMW-058	TCMW-06M	TCMW-06S
	Sample Date	03/25/03	03/25/03	03/25/03	03/25/03
	Units	ug/l	ug/f	ug/l	ug/l
Compound					
Monochlorobiphenyl Dichlorobiphenyl	edno or servicio di cassino di cassi	0.1 U U K0	0.1 U	0.1 U 0.1 U	0.1 U 0,1 U
Trichlorobinhenyl		0,1 U	0,1 U	0.1 U	0,1 U
Trichlorobiphenyl Tetrachlorobiphenyl		0.21)	0.2 U	0.2 U	0.2 U 0.2 U
Pentachlorobiphenyl Hexachlorobiphenyl	***********	0.2 U	0.2 U 0.2 U	0.2 U 0.2 U	0.2 U G2.H
Herachlorobiphenyl		0,2 U 0,3 U	0.3 U	0.Z U 0.3 U	0.3 U
Octachlorobiphenyl		03U	030	93 Ü	(3·U
Nonachlorobiphenyl Decachlorobiphenyl Total PCBs		0. <b>5</b> U	0.5 U	0.5 U	0.5 U
Decachiorobiphenyl  Total PCRs		6.5 U ND	03 U ND	ND ND	0.≰U ND
10011 (4)		ND	NO	ND.	AD.
	######################################				
			3		
	enteriore de la company				
		CONTRACTOR CONTRACTOR AND CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACT		06/200000000000000000000000000000000000	

U - not detected, J - estimated value, J - estimated value (blased low), J+ - estimated value (blased high), N - tentarively identified, R - rejected, M - EMPC, D - result from diluted analysis, EB - equipment blank, DUP - field duplicate.



### Sauget Area 1

### Ground Water - March 2003 Method 6010/7470 Inorganic Data

	Sample ID	TCMW-01M	TCMW-015	TCMW-02	TCMW-03M	TCMW-03S	TCMW-038 DUP	TCMW-04
	Sample Date	03/26/03	03/26/03	03/27/03	03/26/03	03/26/03	03/26/03	03/27/03
	Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Compound								
Aluminum		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Antimony		0.02 U	0,0211	0.02 ()	0.02 U	0.02 U	0.02 (f	0.02U
Arsenic	. Oran de la companya	0.01 U	0.01 U	0,01 U	U 10.0	U 10.0	0.01 U	0.01 U
Berium		0.21	0.29	0.16	0.38	0.099	0.097	0:12
Beryllium Cadmum	Land Control of Control of Control of Control	0,004 U	0.004 U	0.004 U	0.004 U	0.004 T	0.004 U	0,004 U
Calcium		0.005 (j) 170	0.005 U 170	0.001°U 120	0.005 U	6.001 U	0.005 U	0.001 U
Chromium		0.01 U	0.01 <b>U</b>	0.01 U	190 0.01 U	160 001 U	160 0. <b>6</b> 1.17	130 0.01 U
Cobalt		0.01 U	0.004 J	0.0027 J	0.01 U	0.0032 J	0.0035 J	
Copper		0.021	0.02 11	0.02 tr	0,01 G	0,003 U	0.033 J 0.02 U	0.004 J 0.02 U
Iron	0.000	21	0.05 U	0.05 U	20	2.8	2.8	0.05 U
Lead		0.00519	0.003 U	0.005 U	0.005.U	0.005 U	0.0 <del>03</del> U	0.005 U
Magnesium	_	36	27	23	41	34	34	28
Manganasa			0.38	0.45	1.2	1.5	ľđ.	0.37
Mercury		0.0002 U	0.0002 U	0,0002 U	0.0002 U		0.0002 U	0.0002 U
Nicket		୰୰୰୰ଽ <i>୰୰ଵଵ</i> ୰୰ଽ୰୰ଡ଼ୠୠୠୠୠୠୠୠୠୠୠୠ୷୷୷ଢ଼ୄୣ୷ୡୡୣ୷୷୷୷୷୷୷୷୷୷୷୷୷୷୷୷୷୷୷୷୷୷୷୷୷୷୷୷୷୷	0.0088J	0.00813	0.04 U	0.00573	0.0063 J	0.0089.1
Potassium		6.5	8.3	5.7	12	6,5	6.3	6.3
Solenium			0.01.UJ#	0,01 U	0,01 U	cotu.	0.01.U	0.01:13
Silver	000000000000000000000000000000000000000	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0] <b>U</b>	0.01 U
Sodium		<b>10</b>	48	25	120	30	29	6,6
Thallium Vanadium			0.01 U 0.01 U	U 10.0 U 10.0	0,01 U 0.01 U	0.01 U 0.01 U	0.01 U	0.01 U
Zino		\$7,400 cm 0,500 cm 0	0,044	0.046	0.033	NASANSANSANSANSANSANSANSANSANSANSANSANSA	0.01 U	OOLU
23310		VWTQ	U/UTT		CC0.0	V.V. 7.	0.041	0.043
	\$ 180 <b>8</b> 8 10 10 10 10 10 10 10 10 10 10 10 10 10							
	088883488608293486086			00000000000000000000000000000000000000			lie Militari (Comerce de estre	obsert lede welle westelstelstelstelstelstelstelstelstelste

NOTES: U - not detected, J - estimated value, J -- estimated value (biased low), J + - estimated value (biased high), N - tentatively identified, R - rejected, M - EMPC, D - result from diluted analysis, EB - equipment blank, DUP - field duplicate.

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### Appendix A Solutia Sauget Area 1 Ground Water - March 2003

### Method 6010/7470 Inorganic Data

			ACIC DATA			
	Sample ID	TCMW-05M	TCMW-05S	TCMW-06M	TCMW-06S	
	Sample Date	03/25/03	03/25/03	03/25/03	03/25/03	
·	Units	mg/l	mg/l	mg/l	mg/l	
Compound						
Aluminum		0,2 U	0.2 U	0.2 U	0.2 U	
Antimony Arsenic		0.02 U 0.0059 J	0.02 U 0.01 U	0.02.1J 0.006 J	0.02.U 0.01 U	
Barium Beryllium		0,21 0,004 U	0,2 0,004 U	0.33 0.004 U	0.21 0.004 U	
Cadmium Calcium		0.005 U 170	0.005 U 130	6:003 U 120	0. <b>005</b> U 160	
Chromium Cobalt		0 0 1 3	0 01 U 0.01 U	0.01 U	0.01 U 0.0017 J	
Соррен		0.01 U 0.0066 X	0.02 U	0.02 Ü	0,001/3 0,02 U 0,05 U	
fron Lend		28 0.0033 J	0.05 U 0.005 U	9.2 0.001(U	.0.005:U	
Magnesium Manganese		37 12	30 0.033	24 \$	40 014	<b>3.33 3.</b> 30 <b>3.</b> 30 <b>3.</b> 30 <b>3.30 3</b>
Mercury Nickel		0,0002 U 0,0064 I	0.0002 ป 0.0053 J	0,0002 U 0.04 U	0.0002 U 0.014 J	
Polassium Selenium		6.5 D.D. U	5.7 0.01 U	4.5 0.01 U	7.1 0.01 U	
Silver Sodium		0,01 U 15	0.01 U 5.7	0,01 U 14	0.01 U 18	
Thailium Vanadium		0.01 U 0.01U	0.01 U 0.01 U	0.01 U 0.01 U	0.01 U 0.01 U	
Zino		0.039	0.042	0.044	0.048	
NOTES: U-not detected, J	estimated value, J c	stimated value (biased low), J+ -e	stimated value (blased high), N + 6	entatively identified, R - rejected,	M - EMPC, D - result from diluted analysi	s, EB - equipment blank, DUP - field duplicate.
						Page 2 of 2